



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/885,226

06/20/2001

Robert L. Payer

1065us

4417

25263 7590 03/24/2009

HOUSTON ELISEEVA LLP  
4 MILITIA DRIVE  
SUITE 4  
LEXINGTON, MA 02421

EXAMINER

HYEON, HAE M

ART UNIT

PAPER NUMBER

2839

MAIL DATE

DELIVERY MODE

03/24/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* ROBERT L. PAYER and LIVIA M. RACZ

---

Appeal 2008-5745  
Application 09/885,226<sup>1</sup>  
Technology Center 2800

---

Decided:<sup>2</sup> March 24, 2009

---

Before KENNETH W. HAIRSTON, MAHSHID D. SAADAT, and  
SCOTT R. BOALICK, *Administrative Patent Judges*.

BOALICK, *Administrative Patent Judge*.

---

<sup>1</sup> Application filed June 20, 2001. The real party in interest is Axsun Technologies, Inc.

<sup>2</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, begins to run from the decided date shown on this page of the decision. The time period does not run from the Mail Date (paper delivery) or Notification Date (electronic delivery).

## DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134(a) from the rejection of claims 1-26.<sup>3</sup> We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

## STATEMENT OF THE CASE

Appellants' invention relates to a micro-optical component.

Claim 1 is exemplary:

1. A micro-optical component, comprising:

an optical element, including a lens, for interacting with an optical beam; and

a mounting structure for attaching the optical element to an optical bench;

wherein the optical element is solid-phase welded to the mounting structure.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Dautartas	US 5,841,544	Nov. 24, 1998
Synder	US 5,888,841	Mar. 30, 1999
Musk	WO 91/06022	May 2, 1991
Aksyuk	EP 0961150 A2	Dec. 1, 1999

---

<sup>3</sup> Claims 27-34 have been withdrawn.

Claims 1 and 2 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Dautartas.

Claims 3, 4, and 9-13 stand rejected under 35 U.S.C. § 103(a) as being obvious over Dautartas and Synder.

Claims 5-8 stand rejected under 35 U.S.C. § 103(a) as being obvious over Dautartas and Aksyuk.

Claims 14, 15, and 18-23 stand rejected under 35 U.S.C. § 103(a) as being obvious over Dautartas, Musk, and Aksyuk.

Claims 16, 17, and 24-26 stand rejected under 35 U.S.C. § 103(a) as being obvious over Dautartas, Musk, and Synder.

Rather than repeat the arguments of Appellants or the Examiner, we make reference to the Brief and the Answer for their respective details. Except as noted in this decision, Appellants have not presented any substantive arguments directed separately to the patentability of the dependent claims or related claims in each group. In the absence of a separate argument with respect to those claims, they stand or fall with the representative independent claim. *See* 37 C.F.R. § 41.37(c)(1)(vii). Only those arguments actually made by Appellants have been considered in this decision. Arguments that Appellants did not make in the Brief have not been considered and are deemed to be waived. *See id.*

### ISSUE

Appellants argue that Dautartas does not anticipate because it does not teach the claimed mounting structure and instead "shows a ball lens 32 being solid phase welded directly to an optical bench 12 or platform" (App. Br. 3).

With respect to the obviousness rejection over Dautartas, Musk, and Aksyuk, Appellants again argue that Dautartas does not teach or suggest the claimed mounting structure and further argue that "the secondary references do not teach the combination of the solid phase welding of an optical element to a mounting structure and solder bonding of the mounting structure to the bench" (App. Br. 4).

Appellants' arguments present the following issues:

1. Have Appellants shown that the Examiner erred in finding that Dautartas teaches a mounting structure for attaching the optical element to an optical bench where the optical element is solid-phase welded to the mounting structure?
2. Have Appellants shown that the Examiner erred in finding that the combined references teach solid phase welding of an optical element to a mounting structure and solder bonding of the mounting structure to an optical bench?

#### FINDINGS OF FACT

The record supports the following findings of fact (FF) by a preponderance of the evidence.

1. In the "BACKGROUND OF THE INVENTION" section, Appellants' Specification teaches that "[o]ne type of solid phase welding is referred to as thermocompression bonding." (Spec. 1:16.)

2. Dautartas teaches a lens 32 that is secured to a platform 12 by thermocompression bonding. (Col. 2, ll. 30-32, 58-59; Fig. 1.) The platform 12 is mounted on a base 70. (Col. 2, l. 63 to col. 3, l. 1; Fig. 6.)
3. Musk describes a lens mount 1 for a lens 6. (P. 4, ll. 4-8; Fig. 1.) The lens mount 1 is mounted on a base 10 by soldering. (P. 5, ll. 1-7; Fig. 2.)

### PRINCIPLES OF LAW

On appeal, all timely filed evidence and properly presented arguments are considered by the Board. *See In re Piasecki*, 745 F.2d 1468, 1472 (Fed. Cir. 1984).

In the examination of a patent application, the Examiner bears the initial burden of showing a prima facie case of unpatentability. *Id.* at 1472. When that burden is met, the burden then shifts to the Applicant to rebut. *Id.*; *see also In re Harris*, 409 F.3d 1339, 1343-44 (Fed. Cir. 2005) (finding rebuttal evidence unpersuasive). If the Applicant produces rebuttal evidence of adequate weight, the prima facie case of unpatentability is dissipated. *In re Piasecki*, 745 F.2d at 1472. Thereafter, patentability is determined in view of the entire record. *Id.* However, on appeal to the Board it is the Appellant's burden to establish that the Examiner did not sustain the necessary burden and to show that the Examiner erred.

Anticipation is established when a single prior art reference discloses expressly or under the principles of inherency each and every limitation of the claimed invention. *Atlas Powder Co. v. IRECO Inc.*, 190 F.3d 1342,

1347 (Fed. Cir. 1999); *In re Paulsen*, 30 F.3d 1475, 1478-79 (Fed. Cir. 1994).

"Section 103 forbids issuance of a patent when 'the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.'" *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 127 S. Ct. 1727, 1734 (2007). In *KSR*, the Supreme Court reaffirmed that "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *Id.* at 1739. "[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006).

## ANALYSIS

### *§ 102 Rejection - Dautartas*

Appellants' arguments that the Examiner erred in rejecting claim 1 as being anticipated by Dautartas are not persuasive.

Contrary to Appellants' arguments, element 12 of Dautartas does not correspond to the claimed optical bench. Instead, as the Examiner found, element 12 of Dautartas corresponds to the claimed mounting structure. (Ans. 3, 7; *see* FF 1, 2.) Because thermocompression bonding is one type of solid phase welding (FF 1), the optical element 32 of Dautartas is solid phase welded to the mounting structure 12 (*see* FF 2). Furthermore, it is

element 70 of Dautartas that corresponds to the claimed optical bench.  
(Ans. 3, 7; *see* FF 2.)

Therefore, Appellants have not shown that the Examiner erred in finding that Dautartas teaches a mounting structure for attaching the optical element to an optical bench where the optical element is solid-phase welded to the mounting structure.

Accordingly, we conclude that Appellants have not shown that the Examiner erred in rejecting claim 1 under 35 U.S.C. § 102(b). Claim 2 was not argued separately, and falls together with claim 1.

*§ 103 Rejection - Dautartas / Synder*

Because Appellants have not provided any arguments regarding this rejection, Appellants have not shown that the Examiner erred and we will sustain the rejection for the reasons given by the Examiner.

*§ 103 Rejection - Dautartas / Aksyuk*

Because Appellants have not provided any arguments regarding this rejection, Appellants have not shown that the Examiner erred and we will sustain the rejection for the reasons given by the Examiner.

*§ 103 Rejection - Dautartas / Musk / Aksyuk*

Appellants' arguments that the Examiner erred in rejecting claim 14 as being obvious over Dautartas, Musk, and Aksyuk are not persuasive.

As discussed above, Dautartas teaches the claimed mounting structure. In addition, as the Examiner correctly found, Musk teaches that the mounting structure is soldered to the bench and the Examiner has



articulated reasons with rational underpinnings for combining the teachings of Dautartas, Musk, and Aksyuk. (Ans. 5-6, 8; FF 3.)

Therefore, Appellants have not shown that the Examiner erred in finding that the combined references teach solid phase welding of an optical element to a mounting structure and solder bonding of the mounting structure to an optical bench.

Accordingly, we conclude that Appellants have not shown that the Examiner erred in rejecting claim 14 under 35 U.S.C. § 103(a). Claims 15 and 18-23 were not argued separately and fall together with claim 1.

*§ 103 Rejection - Dautartas / Musk / Synder*

Because Appellants have not provided any arguments regarding this rejection, Appellants have not shown that the Examiner erred and we will sustain the rejection for the reasons given by the Examiner.

CONCLUSION

Based on the findings of facts and analysis above, we conclude that Appellants have not shown that the Examiner erred in rejecting claims 1-26.

DECISION

The rejection of claims 1-26 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

Appeal 2008-5745  
Application 08/885,226

ack

cc:

HOUSTON ELISEEVA LLP  
4 MILITIA DRIVE  
SUITE 4  
LEXINGTON, MA 02421